Computer Dealer Demos: Selling Home Computers with Bouncing Balls and Animated Logos

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Computer dealer demos, such as *Boing Ball* for the Commodore Amiga, were used to impress trade show audiences and retail customers. Dealer demos, such as those used by Commodore International, Atari, and Apple, illustrate how the home computer was socially constructed as a consumer commodity through the interdependent activities of software companies and user communities rather than simply through the marketing strategies of the hardware industry.

This article discusses how home computer manufacturers used demonstration software, referred in the industry as *dealer demos,* to get the attention of potential customers. Computers presented during trade shows and exhibited in retail stores ran such programs with an aim to convince clients to buy a specific hardware platform. In 1983, software company International Micro Systems advertised its "dealer demo software" in *InfoWorld,* a trade magazine of the US computer industry: "We think you think the same way we think … that the best way to sell hardware is by demonstrating what it will do."[1] Roberta Sassatelli in *Consumer Culture* claims that to be desired by potential clients, consumer goods have to be "*symbolically presented* to the public through a message, but they also have to be *materially present* for the public. They must and will, as it were, speak for themselves" [italics original].[2] Computers demonstrated in public running dealer demos carried out both tasks. Potential consumers could inspect a computer as a material artifact. At the same time, eye-catching demos with high-quality visual and sound effects helped to "symbolically present" these computers to the public.

While discussing the creation and application of dealer demos, I hope to shed some light on an overlooked aspect of the history of home computers. In this article, I discuss how these programs were used in the advertising campaigns of three major home computer manufacturers of the era: Commodore International, Atari, and Apple. Dealer demos were produced not only by hardware manufacturers' in-house software and marketing departments but also by independent software developers and user communities who contributed these artifacts to the hardware industry. My study shows how several actors co-constructed home computers along with technology designers.[3] Currently, user-generated content is extensively used in Web marketing. This case shows a historical background of such phenomenon in the computer industry.

Dealer demos are artifacts of advertising culture similar to TV commercials and press advertisements. The basic strategies of contemporary advertising are based on the social construction of a particular commodity by "opening up the product to the consumer—making it practically, emotionally and culturally accessible."[4] In this article, I refer to these three basic strategies—showing practical advantages, building emotional relationships, and providing consumers with attractive cultural practices of using a commodity—to explain the role of dealer demos.

In the 1970s computers developed for hobby computing circles were regarded as black boxes inaccessible to anyone without knowledge of electronics and programming. In the following decade, hardware manufacturers successfully attempted to present computers to the broader public. Dealer demo

 Published by the IEEE Computer Society 1058-6180/13/$31.00 © 2013 IEEE

content played a significant role in "opening up" computers. Claims on computer ease of use and information about how computers could be used for leisure, educational, or professional activities made them practically and culturally accessible. Attractive audio-visual demonstrations showed that these devices could produce attractive aesthetic objects. Finally, cartoonish figures and a personal touch aimed to establish an emotional relationship with technology.

In the computer world, a "demo" could refer to a commercial demonstration of a computer-related product as well as noncommercial multimedia presentations made by the demoscene, a computer-oriented subculture. Most commercial dealer demos are recognized as significant to the demoscene discourse and are included in relevant databases such as Pouët (www.pouet.net). However, these objects, which presented manufacturers' logos and advertising slogans, do not fit into one of the basic unwritten rules of the demoscene concerning the noncommercial nature of such presentations. Markku Reunanen refers to a demo as "a program showcasing the programming and artistic skills of the author(s)."[5] Commercial dealer demos could be controversial from the viewpoint of circles of computer artists and hackers who frequently claim that their goal is to challenge corporate strategies aimed to make profit and control technology users.[6] However, dealer demos are recognized as relevant to the cultural image of a specific hardware platform. For instance, two animations made for the Commodore Amiga, *Boing Ball* (1984) and *The Juggler* (1986), are recognized by the Amiga user community as having significant cultural value. Both objects were previously used as dealer demos. *Boing Ball* was made by the original Amiga development team to impress representatives of the industry and encourage them to invest in the project. *The Juggler,* made by an independent animator, was later acquired by Commodore and used as an advertisement; its use of Amiga's 3D graphics impressed several. As we will further see, some dealer demos were acclaimed in user communities for their technological achievements, primarily with 3D graphics.

This article is based on an analysis of the content of dealer demos preserved in online software databases, the computer press, and available interviews with the demos' authors. Writing this article was an adventure that included several hours of browsing collections of vintage system disks, public domain software collections, and demoscene productions. I was able to write this article only because of the work of dozens of computer aficionados involved in the preservation of such software artifacts.

Computer Advertising and Dealer Demos

The history of mainframe computer advertising has been covered in depth by William Aspray and Donald deB. Beaver.[7] These authors have shown how hardware advertisements, which provide technical details as well as cultural and economic references, could serve as valuable sources in the study of the history of cultural meanings given to computers.[8] Recently, the history of mainframe computer advertising received some attention, fueled by the acclaimed AMC *Mad Men* TV series.[9] This article also emphasized sexual references in mainframe computer advertisements. Both articles provide a historical background for the study of advertising strategies of home computers.

The 1980s was a period of fast expansion of the home computer market and development of new marketing and advertising techniques in the industry. Popular buyers' guides refer to the rational choice of potential computer owners, who should choose computers that will suit their needs and have the best technical parameters for a reasonable price. However, several other approaches to "opening up" hardware platforms by showing an aesthetic and emotional approach were developed by the computer industry and advertising agencies.

Here I can point out a few examples of computer advertising campaigns not based on emphasizing technical capacities but rather aesthetics and emotions. The current IBM logo was designed in 1972 by the legendary Madison Avenue graphic designer Paul Rand. Aspray and Beaver discussed the strategy of selling computers as animated office artifacts in which a secretary could eventually fall in love.[10] The strategy of building up the emotional values of a computer became widespread in the early 1980s when computers evolved from office technology into consumer electronics products. Bruce Silverman, executive vice president of the Los Angeles office of the giant advertising agency Batten, Barton, Durstine & Osborn, explained the secret of computer advertising during the Billboard Computer Software/Video Game Conference: "People think they're buying computers for rational reasons, but more

often than not, they're buying for emotional reasons … and rationalizing it later."[11] The famous Apple Macintosh's Superbowl ad (1984) produced by the Chiat/Day agency and directed by Ridley Scott is recognized as one of the most influential advertisements in the history of the advertising industry, next to the VW Beetle advertisements from the 1960s.[12] This ad was also one of the first high-profile cases in which a computer was presented as a "device of liberation" juxtaposed with the "oppressive" IBM.[13] The spectacular success of the Commodore 64 (1982) was a result of its technical capacities and Jack Tramiel's aggressive pricing policy, but also an extensive advertising campaign made by the Ally & Gargano agency. In 1983 A&G won both the Clio and the Effie, the most prestigious awards in the advertising industry, for the C-64 campaign. Catchy jingles were used in the computer industry, too. Two potentates of the electronics industry, Intel and NVIDIA, aside from claims of hardware technical capacities, built brand identity with "Intel Inside" and "NVIDIA: The Way It's Meant to Be Played" jingles included in advertisements and software products. Another jingle heard every day by millions of computer users while starting Microsoft Windows 95, known as "the Microsoft Sound," was made by Brian Eno, a legend of the electronic music scene.

The dealer demo concept in the consumer electronics industry appeared in the late 1950s, a time of "the creative revolution" in advertising. A 1959 article in *Billboard,* the trade journal of the industry, discussed a carefully planned presentation of a new audio hardware organized by Macy's department store.[14] While discussing the advantages and capacities of new hardware for the audience of media reporters and potential dealers, the Macy's spokesperson played a music recording while operating hardware and claiming how easily it could be used. Furthermore, in the industry the terms "demo" and "dealer demo" were used for both a piece of equipment displayed in a retail store, also referred to as an "in-store demo," as well as a trade show event where new consumer electronics were introduced.

From the 1980s on, computers were not only present in press, TV, and radio advertisements, but they were also exposed to a wide audience of potential customers onsite in retail store windows. In the 1980s computers had to appeal to potential customers who had little idea about the devices. The most convincing way to "symbolically present" these goods was to show what a turned-on computer could do by running a dealer demo. Whereas audio and video hardware is best presented to an audience by playing a record or movie, computers are best presented while running an actual piece of software or attractive graphics and sound presentation.

Several dealer demos were used by the industry to get the interest of potential dealers and media during trade shows and to impress potential customers in retail stores. In the 1970s the first personal computers, the Apple II (1977) and the Commodore PET (1977), were distributed by manufacturers through selected authorized distributors. Another hardware platform, the TRS-80 (1977), was distributed through Radio Shack stores. In the next decade, aside from such dealers, home computers were sold in several department stores. For instance, the C-64 was sold at Sears, Toys 'R Us, Montgomery Ward, Fred Meyer, K-Mart, and Lionel Play World chain stores.[15] One problem with distributing computers in general chain stores was the lack of qualified salespersons who could provide potential customers with detailed information. A journalist from the an entry-level computer magazine *Family Computing* noted,

> You can't expect to go into a store and get much help. You've got to know what you want beforehand. In Toys 'R Us, they saw computers sold next to baseball bats and Nerf balls. In Sears, next to lawnmowers. In some Radio Shacks, beneath the din of rock 'n roll. Stores, in fact, were selling computers just as people were buying them, helter-skelter.[16]

Dealer demos, which include both basic information on computer use and attractive audio-visual presentations, helped the industry solve the problem of the lack of skilled salespersons.

Commodore International

The Commodore 2001 PET dealer demo was probably the first demonstration program made for personal computers.[17] The first screen from this demo with the PET logo on a monitor was published in at least two different sales brochures.[18] The demo itself was a slideshow that subsequently presented the PET's technical capabilities, available peripherals, and potential scripts of computer use. The first claim, "With PET's graphics, you can

draw fancy bar graphs," was illustrated by a graph of stock growth in which Commodore stock was growing much faster than stocks of Intel and Atari. The next claim, "PET can play games," was illustrated by a screen from the *Lunar Lander* game, the listing of which was included in the PET user manual.[19] The last section included an image of the USS Enterprise made with semigraphic characters with the caption, "The Starship Enterprise brought to you by Commodore's PET." The reference to *Star Trek* was geared toward the computer users of the era, who were commonly equated with trekkies. This demo was used to promote the PET during the Winter Consumer Electronics Show (CES) in 1978. In his book on Commodore's history, Brian Bagnall included a photo taken during this show that shows Chuck Peddle, PET's main designer, with several PET computers simultaneously displaying the USS Enterprise screen.[20]

According to Bagnall, the C-64 prototype was shown during the Winter CES in 1982 with a carefully designed demo of an animated human figure that emphasized several features of this computer.[21] This figure, a "sprite guy," aimed to show a new feature, the hardware support for sprites—small animated objects useful in computer game programming.[22] It is unclear if this demo was preserved at all. A motif of a small animated human figure was included in the *Commodore Sales Cartridge* (Commodore, 1982) used to present the C-64 in retail stores. This demo began with a slogan "The Commodore 64. A real computer you can use today!" and included a small female figure walking through the screen and presenting C-64 features, such as a large selection of software and peripherals. Next, the C-64 was advertised as a game machine: "Commodore 64's unsurpassed graphics and sound capabilities have yielded the best recreational software around." Potential users were encouraged to write their own games with easy-to-use screen sprite editors. This encouragement was one of the key elements in Commodore's strategy. The company offered a detailed technical manual for users who could easily write their own programs, thus enlarging the available C-64 software library.

Family Computing reports show a practical way of using in-store demo, probably *Sales Cartridge,* to present the C-64 to potential consumer in Computer Strategies retail store:

> Several others attended the demonstration . . . An elderly woman hobbled in with her cane and took a seat right in front of the computer and screen. The demonstration program rolled, describing the Commodore 64's graphics capability, its programmable music keys, its clear sound, and its large memory (64K). The saleswoman pointed to the monitor as she talked, to emphasize certain points. The first was price—$495.[23]

Potential Commodore users were encouraged to write their own games with easy-to-use screen sprite editors.

Commodore also advertised both the C-64 and portable model SX-64 (Executive) with the *Commodore Christmas Demo* (Commodore, 1982) included on disks in the SX-64 packages sent to American Commodore dealers.[24] The idea of advertising a computer with a Christmas theme was previously used by Tandy to promote the TRS-80 computer with the *Radio Shack Christmas Demo* in 1979. Such an advertising strategy during a traditional high season for consumer electronics sales referred to users' custom of making animated computer Christmas cards included on several public domain disks or sent through the Bulletin Board Systems.[25] The *Commodore Christmas Demo* was an animation with typical Christmas themes: Christmas tree, Santa Claus, and snow falling on the Commodore chicken head logo with the message "Seasons Greetings from Commodore." At the end, technical details were given with a slogan, "The Perfect Holiday Gift," and a flashing retail price. This demo seems to be a suitable help for selling the C-64 during the 1982 Christmas season. However, it is difficult to determine why Commodore used it to promote the SX-64 model, which was aimed at business clients, because neither the Christmas theme nor color animation would impress this audience.

The two most popular demo animations for the Amiga computer—*Boing Ball* and *The Juggler*—have been extensively covered in the Amiga community sources. Recently Jimmy Maher provided an in-depth analysis of the

technology behind both productions and their role in building Amiga users' community identity.[26] *Boing Ball* was made by RJ Mical, a member of Amiga development team, and used during the 1984 Winter CES to raise interest in this hardware project. The Commodore marketing department later decided to replace the *Boing Ball* with a rainbow checkmark as the official logo of Amiga. However, the *Boing Ball* is still recognized in the Amiga community as a symbol of independent technology enthusiasts who have been suppressed by short-sighted corporate people, which finally caused the Amiga's demise.

The Juggler was made by computer animator Eric Graham with the aim of showing the ability of the Amiga graphic chipset to calculate and display 3D ray-traced objects.[27] A website dedicated to *The Juggler* run by Ernie Wright quotes a letter from Graham discussing how and why he submitted this demo to Commodore:

> The reaction amongst the Amiga community in Albuquerque encouraged me to send it to Commodore. Their legal department thought it was a hoax, and that I'd done the image generation on a mainframe, so I sent Commodore the small program so they could run it themselves and generate the big Juggler file. Then they sent me $1,000 or maybe $2,000 for the rights to use it for promotional purposes.[28]

Commodore subsequently distributed *The Juggler* to Amiga dealers and made it available on BBSes and PD disks. *The Juggler* footage was also used in several Amiga TV commercials. Wright claims that this demo was one of reasons he became interested not only in the Amiga but also in 3D graphics: "Juggler was an astounding demo in its time. I personally remember staring at it for several minutes through the front window of a local Amiga dealer, wondering how it 'worked.'"[28] Similarly, Victor Osaka, a computer graphics designer, claimed that watching "a colorful animation of a juggler fashioned in sort of a 'Michelin Man' model" in a Software Etc. Store in Los Angeles was one of reasons he became an Amiga user.[29]

The Amiga was also marketed using demos based on the scenarios provided by the Commodore marketing department. The *Fred and Rose Multitasking Demo* (Commodore, 1985) was made by a small company, Central Coast Software. It was a cartoonish slideshow with a few interactive elements that aimed to show how the Amiga 1000 could be useful for small business because of its multitasking feature. A slogan stated that "the whole idea of a personal business computer is to save you time, and increase your productivity." Previously, according to this demo, such productivity was limited by computers capable of running one program at a time. "The Amiga however is able to do several things at the same time. That's called multi-tasking." The two protagonists in this production, Fred the Baker and Rose the Florist, are able to generate a list of client addresses stored in a database and edit a promotional leaflet at the same time using Amiga's multitasking. This demo is not very convincing since generating the address list in this animation only takes a few seconds and it is unclear why the user wouldn't just wait a moment to continue with the other task. A similar cartoonish presentation of the Amiga's multitasking capability was included in a promotional video.[30] In a chapter dedicated to multitasking, an animation shows a cartoonish ancient Egyptian clerk using the Amiga 2000. With the multitasking feature, the clerk simultaneously collects data from two of his subordinates to prepare a data chart.

Both advertisements aimed to convince businesses to acquire the Amiga. However, it is difficult to estimate if the briefly explained idea of multitasking would convince clients with no prior experience with computers. Advertising multitasking with such a brief explanation is similar to using the graphic illustrations of mainframe computer features such as batch systems, time sharing, and networking discussed by Aspray and Beaver.[31] Understanding such features required considerable knowledge of computing technology and, as the authors claim, it is unclear if such advertisements were appealing to the target audience.

In 1989 Commodore released the *Amiga Dealer Demo* (Commodore, 1989), which was a collection of slideshows split into sections: "Art & Graphics," "Video," "Music," "Entertainment," "Productivity," "Education," "Products," and "Amiga Features." Slideshows with advertising slogans included graphics of Jim Sachs, a well-known computer graphic designer and the author of graphics for the *Defender of The Crown* game who worked for Commodore after breaking with Cinemaware. Sachs also designed the graphic layout of the Commodore CDTV interface menu.[32] His graphics from the

Amiga Dealer Demo, especially pictures of the Amiga motherboard with the *Boing Ball* motif and a video camera, were included in several Amiga magazines and on PD disks.[33] The demo emphasized graphic and sound capacities of the Amiga with the slogans, "The Amiga allows even non-artists to produce stunning photographic quality pictures" and "The Amiga is the most powerful desktop animation system available to the consumer." What is striking is that this official demo of the product was released in 1989, although Amiga had been on the market for four years and both the A500 and the A2000 models for two years. It is also unclear which Amiga is actually advertised. In the main menu, a picture of the A500 is displayed, but further pictures show the A2000 as a computer intended for multimedia production and business purposes. Even in the Entertainment chapter, the A2000 is pictured as a game platform symbolized by a jetfighter flying from the monitor and joystick next to computer, not the A500. Not a single statement concerning crucial differences between those two models is included in the demo. The significant delay and lack of coherence with the Amiga models shows a weakness of the Commodore marketing department, which had trouble targeting the Amiga as a game platform, multimedia production, or a business platform.[34]

European Commodore branches used two demos acquired from external software developers in Amiga marketing. The first is the *Amiga Magic Interactive Retail Demo* (Tecnation/CBM UK Ltd., 1987). This production was made for Commodore UK by British company Tecnation, currently named O'Wonder, which specialized in audio production software. According to the O'Wonder website, the company approached Commodore with this "computer demonstration package":

> Surprised that the Amiga was not being given an opportunity to show its full potential, O'WONDER approached Commodore in 1987 with an offer to design and develop software for dealers to use to demonstrate the machine's remarkable capabilities. Commodore accepted and Amiga Magic was born.[35]

Amiga Magic includes two simple programs for 3D ray-tracing and sound editing, which are notable for their complex graphic user interfaces. Tecnation claims that the company focused on introducing such an innovative "animated GUI" in their software, which provides users with "interactivity," contrary to other demos that are merely automated slideshows. This demo also provides some "interactivity" for Amiga dealers. Using a simple text editor, a dealer could include the company address and advertising slogans, which will be included later in the presentation. Tecnation's website quotes a few positive reviews of the demo from British Amiga magazines. However, it is unclear if this program was actually used by Commodore UK or local dealers. A British member of the demoscene claimed that the favorite method of advertising the Amiga in the UK was to run the impressive *RSI Megademo* (Red Sector, 1989), a ground-breaking audio-visual presentation made by German demoscene on computers in stores.[36]

The demos show how a hardware manufacturer eagerly included demos offered by independent software companies and user communities to promote the Amiga.

The French branch of Commodore used a demoscene production made by French group Digital in a marketing campaign for the A1200 introduced in 1992. French and English language versions were released and subsequently named the *Official Commodore France 1200 Demo* and *AGA Point of Sale* (Digital, 1992). This production is an example of a typical Amiga demoscene aesthetics of the era. It features high-color graphics effects, 3D animated vector objects, and color fractals. In most effects, the Commodore chicken head logo is included as a vector object or a background theme. The Pouët database entry claims that this demo was made in April 1992, a few months before the official release of A1200 in October 1992.[37] According to a Pouët entry comment written by a French member of the demoscene acquainted with the Digital group, the demo was a result of a

Atari included several multimedia presentations as promotional materials.

close collaboration between Digital and Commodore: "Gengis the coder, had the official A1200 specs and documentations before the computer was available in the shops! … [T]his demo was shown in lots of shops in France when the A1200 was out."[38]

The aforementioned demos show how a hardware manufacturer, in addition to using promotional software made in house, eagerly included demos offered by independent software companies and user communities to promote the Amiga. This issue shows how, in the 1980s, third-party companies and user communities were strongly interdependent with hardware manufacturers. Although *The Juggler* and *Amiga Magic* were simply acquired by Commodore, the case of *AGA Point of Sale* shows how user communities were also be engaged in the promotion of a hardware platform during the product release phase. Similar cases from Atari and Apple show a similar interdependence.

Atari

The first demo released by Atari, the *Atari Dealer Demo* (Atari, 1980), aimed to popularize the 400/800 series. It was completely different from the *PET Demo* made three years earlier. Instead of emphasizing the hardware's technical capabilities and trying to impress trekkies, it targeted a broader audience with no computer experience. The demo begins with the full-screen color Atari Fuji logo (so-named because of its resemblance to Mt. Fuji in Japan) blinking with rainbow colors, which symbolizes Atari's vast color palette.[39] A series of animations answer the introductory question, "What you can expect from your ATARI personal computer." The potential user is shown that Atari could be used for household management, personal development, education, and home entertainment. The entertainment section is illustrated with screens from the *Star Raiders* game (Atari, 1979), one of Atari's biggest hits. Further, the viewer is asked to type a name, which leads to the next screen with a message that aims to build an emotional relation:

> Hi [typed name] I'm the ATARI Personal computer. You don't have to be a genius to use me. In fact, I'm personal computer so advanced that I'm easy to use. With programs available now. . . I can help you with dozens of your daily activities.

Later, the demo shows potential users the selection of peripherals and highlights authorized service centers as dozens of flashing points on the US map. All these features—potential applications, ease of use, assurance that the user won't be left alone by the company after purchase, and emotional messages—would become the features of the home computer industry advertisements in the 1980s.

Two memoirs show how the *Atari Dealer Demo* had an impact on viewers.

> I was just now transported to myself at 11, with my hands pressed against the glass window of a store in Poughkeepsie, NY, watching this play. . . until my mom screamed at me to get into the car.[40]

> When I was in high school the Atari 800 had just come out. Back then this demo was the most inspiring thing ever! I would look at this demo and think computers were going to change the world.[41]

The *Atari 520 ST USA Dealer Demo* (Atari, 1986) was used to promote the 520ST model. It is a slideshow that begins with the "Atari Presents Power without the Price" slogan—the main advertising slogan of the Atari ST platform. After watching a presentation of the selection of peripherals, the viewer is shown a chart comparing the 520 ST, PC AT, the Macintosh, and the Amiga. The chart includes prices and several technical parameters. The demo automatically moves forward, so the viewer has exactly 25 seconds to compare all chart data. Further, potential computer applications in music, graphics, and desktop publishing (DTP) are shown in short presentations of existing dedicated software. There is no information about using the ST for entertainment and no claims of a user-friendly interface. Unlike the *Atari Dealer Demo* for the 400/800 series, this demo shows that Atari ST was marketed as a computer for

business and media production. The Atari ST was introduced in 1985 along with the repacked 8-bit XE series. The latter platform was marketed as a home computer and game console while the Atari ST was intended for a professional market.

In addition to such informative demos, Atari included several multimedia presentations as promotional materials. *Hollywood Medieval* (Douglas Crockford/Atari, 1982) is a simulation of a flight through an endless tunnel with recognizable theme music.[42] This demo was written by Atari games designer Douglas Crockford, later known for his role in the development of JavaScript. In 1982, Crockford worked as a researcher at the Atari Sunnyvale Research Laboratory. This demo mixed different effects from several of Crockford's projects: "It combined a number of things I was working on. I was working on an infinite maze, a top-down view of a scrolling grid. I was working on a *Star Wars* game. I got as far as flying over the Death Star and flying into the trench."[43] The mysterious name came from Crockford's impression of the demo's music: "I thought some of the music was similar to the stuff in castle movies." *Hollywood Medieval* was probably used as an in-store demo to show Atari's graphics and sound capabilities.

During the 1985 Winter CES, Atari presented the 130XE, which was actually a repacked 800XL model with 128 Kbytes of memory.[44] This computer was promoted with a demo that included three animations—*Atari Robot, Atari Swan,* and *Fuji Boink*—made by a small software company named Xanth FX. The company's representative claimed in *ANALOG Computing* magazine, "We are a large ST retailer. Our F/X division (i.e., Park) churns out demos for the betterment of Atari."[45] According to the testimonies of Atari users in Seattle, it was actually a "small computer store in downtown Seattle" and a small software company that employed a few people, among them programmer and graphic designer Michael A. Park, who used the nickname Xanth Park.[46]

These animations were circulated separately in the Atari user community.[47] All animations included in this demo were written for earlier Atari models and were used to impress customers with new Atari 130XE graphics, which was actually the same as earlier XL series models. The *Atari CES Demo* shows how a software artifact developed and distributed earlier among the user community could be included in an official advertising strategy similarly to *The Juggler.* It is important to note that Atari traditionally collaborated with user communities during trade shows.[48]

The *Atari Robot* (Atari/Xanth FX, 1984) demo includes an animated robot walking in an endless tunnel and a spaceship flying in the space. Pouët comments suggest that *Atari Robot* was included in Atari TV commercials; however, this footage was not found.[49] The *Atari Swan* (Atari/Xanth FX, 1985) is an enhanced version of the logo theme from the original *Atari Dealer Demo*. In the demo, the rainbow Fuji logo rotates along its vertical axis and a small swan regularly flies through the screen. Park claimed that the Atari logo was extracted from the *Robot* demo.[45] He added a model of the logo that gives the illusion that it is a 3D object. The swan, according to Park, was a digitized picture from the *Encyclopedia Britannica* entry for "flight."

Fuji Boink (Xanth FX, 1986) refers to Amiga's *Boing Ball*. First, Xanth FX released *Boing Ball* version for the Atari XL/XE aimed to show that this platform was capable of displaying the same quality of animation as the Amiga. It was named *Boink!* or *Atari Ball* (Xanth FX, 1985). In *Fuji Boink,* released both for the Atari XL/XE and the ST, Park merged the bouncing ball theme with his rotating Atari logo. He described how he got the idea: "combine the spinning fuji with the bouncing motif! What a concept! Call it FujiBoink!"[50]

Xanth's demos were widely circulated among the Atari community as impressive presentations of the Atari's potential. For instance, the PD disk, "Special Demos," bundled with the *New Atari User* computer magazine, [included Xanth's productions and *Hollywood Medieval*.[51] The disk description claims that these demos are "incredible demos [made] to prove that the 8-bit Atari can still do much more than most 'non-Atarians' believe." Furthermore, *Fuji Boink* is called the "pièce de résistance." The original *Boing Ball* became popular among the Amiga community and Atarians used the bouncing Atari logo in building their rival "platform nationalism" to quote Maher's term on the Amiga users' identity.[52]

The last Xanth FX demo made for Atari ST was also obviously made to compete with the Amiga. *Shiny Bubbles* (Xanth FX, 1987) includes 3D ray-traced animation of chrome bubbles which resemble metal balls from *The Juggler.* A constantly moving background surface is covered with the Atari name, which is reflected on the surface of chrome bubbles. One of several versions of *Shiny Bubbles* was

The *Apple IIGS Dealer Demo* was the first dealer demo of a 16-bit computer that focused on the computer as a "creative" multimedia production device.

used in an Atari 1040ST TV commercial.[53] This demo was released in April 1986, six months after the release of *The Juggler.* An enhanced version of *Shiny Bubbles* with more colors was also made for the Atari TT platform. Atari demoscene groups made several versions of this demo for the XL/XE platform. Chrome bubbles became a popular and instantly recognizable theme, similarly to Amiga's chessboard ball, in the visual aesthetics of the Atari user community.

Apple

From the beginning, Apple marketing emphasized its computers' color graphics, high-resolution display, and sound capacity.[54] Tom Hormby, amateur computer historian, claimed that the Apple II, officially unveiled at the West Coast Computer Fair in April 1977, was presented with games and audiovisual multimedia demonstrations:

> At the show, Chris Espinosa and Randy Wigginton, two high school students working for Apple, were charged with the development of a couple demo programs that showcased the multimedia prowess of the Apple II. The pair created a Breakout clone and an animator program.[55]

However, the most remarkable Apple II demo was made one year later by Bob Bishop. Bishop was a computer enthusiast, programmer, and one of the first owners of the Apple II. Among other things he used his machine to write programs that displayed graphics and animations in high-resolution (280 × 192) mode. While working on this project, Bishop became a member of the Apple R&D team. One of his programs, which shows the animation capability and sound quality of the Apple II, was named *Apple-Vision* (Bob Bishop, 1978). The program was an animation of a human figure displayed on a TV screen in a room. *Apple-Vision* presented only monochrome graphics in high-resolution mode. The second program, *Color Demo,* an animation of flickering kaleidoscopic colors in 16-color, 40 × 40 mode, was bundled in the same package.[56] Apple included both programs on the system cassette and system discs included in the Apple II package.[57]

Andy Hertzfeld, a member of the Apple Macintosh development team, claimed that his team wrote several demonstration programs to show the technical capacities of hardware; however, he didn't mention whether any of those demos were used for the public.[58] Michael Tomczyk claimed that Apple programmers made several other graphics demonstrations that include digitized pictures (however, these could not be located in Apple software libraries):

> Apple's resident programming gnome was experimenting with digitizing techniques . . .. He had a disk filled with everything from Playboy bunnies to animated horses. Those stunning galloping horses later showed up on Apple's dealer demo disks and in public domain software, and undoubtedly helped sell lots of Apples.[59]

In 1986, Apple introduced the Apple IIGS, the fifth and last model in the II series. The GS in the name stands for graphics and sound, and this computer was aimed to compete with the Amiga. The Apple IIGS was marketed as a high-end home computer and multimedia platform. Marketing of this platform was supported with the *Apple IIGS Dealer Demo* (Apple, 1986) made in house by Apple. It was the first dealer demo of a 16-bit computer that focused on the computer as a "creative" multimedia production device. The similar *Amiga Dealer Demo* was made three years later. Apple's demo begins with color digitized images of a jazz band while the computer plays a jazz music theme. A digitized picture of the Apple IIGS is displayed along with samples of digitized speech. Later in the demo, small animated human figures, which resemble those from the C-64 demo, show how the Apple GS could be applied for small business purposes, home entertainment, and education. Those scripts of computer use were already present

in the 8-bit marketing campaigns. However, this demo introduced a new section, "for you creative types," which emphasized advanced image and sound processing capabilities, especially the possibility of using digitized images and speech in multimedia productions. The image processing capabilities of the Apple IIGS were also emphasized in the "look" press advertisement with a full-page digitized human eye.[60] Jawaid Bazyar, a programmer popular in the Apple community, describes his fascination with this demo and his first experience with the IIGS:

> In the computer store I used to essentially live in, I was very excited when I heard about the "IIx" project finally coming into existence, and so the very day the IIGS was released I was there. The first thing I saw was the Apple IIGS Dealer Demo—and that blew me away. The best sound I'd ever heard out of any computer, and high-resolution color graphics! Wow![61]

Aside from the official dealer demo, the Apple IIGS was promoted with two demos written by the French demoscene group Free Tools Association (FTA). A small and short-lived Apple IIGS demoscene mirrored the limited popularity of this platform, which definitely lost the competition with the Amiga. Both FTA demos used by Apple—*Nucleus* (1989) and *Modulae* (1990)—show the typical aesthetics of the demoscene of the era with rotating 3D wireframe objects formed into the names FTA, Apple II, and GS. Such expositions of hardware platform names in the demoscene were frequent because the demoscene groups dedicated to specific platforms had a diehard brand identity and aimed to showcase not only their authoring skills but also the hardware's capabilities. Both *Nucleus* and *Modulae* were acclaimed by the user community and noticed by Apple. FTE members claimed that their productions were used to promote the Apple IIGS during the Applefest convention.[62] This case resembles the cooperation between Commodore and the Digital group:

> [Nucleus was] a full 3D-powered demo with modern graphics and fancy musics . . . In less than 2 weeks, the first version spread quickly from Dijon to Cupertino, where the Green Software Engineering team reviewed it. Unfortunately, due to a glitch . . .. It was incompatible with the upcoming ROM03 Motherboard which Apple was about to release. Through their Switzerland office, Apple sent us a prototype of the ROM03 motherboard to make it work in time for the upcoming AppleFest in San Francisco, where then VP Jean-Louis Gassée used it during his talk.[63]

Modulae was also used in another way. FTE members provided a scan of a press advertisement for Quality Computers, an American Apple dealer. With the slogan, "FREE your choice," the company offered a free package of software and accessories. "From now until December 31, 1991, Quality Computers, America's favorite Apple II dealer, offers you something unheard of—free software accessories with every order."[64] Among the offered "premium gifts—up to $40 value," were a mouse pad, blank disks, four commercially released games, and *Modulae*. Claiming to give buyers a free premium bonus of commercial value when that package includes public domain programs is a dubious marketing strategy.

Conclusion

In this article, I discussed how home computer manufacturers included several audio-visual demonstrations in their advertising strategies. Some dealer demos were made by the software departments of hardware manufacturers, but most were made by independent software companies and user communities. By discussing how hardware manufacturers acquired and included those programs as promotional materials, I have shown a practice of interaction between different social actors in the home computer market. Technology marketing and advertising is often viewed as a process shaped and controlled by technology manufacturers, who influence customers and cultural intermediaries with their product. This case shows how eagerly manufacturers included products made by independent programmers and computer graphic designers in their strategies. Moreover, user communities were also eager to offer their software objects to manufacturers.

Analysis of dealer demos shows several weaknesses in the marketing strategies as well as possible organizational problems. For instance, companies apparently made demonstrations for the CES in a hurry. Atari's decision to include a collection of Xanth demos to promote a new computer during its official premiere could mean that the Atari software department was unable to make a production impressive enough to promote this platform at the most important trade show in the

Several motifs from dealer demos became recognizable symbols of hardware platforms and represent emotional approaches toward technological artifacts.

industry. The fact that the official dealer demo for the Amiga was made a few years after the computer release also suggests organizational problems within Commodore.

My article also shows how dealer demo software, similarly to press advertisements discussed by Aspray and Beaver,[7] could be a valuable source for the reconstruction of the cultural image of the home computer. Content analysis of these products clearly shows an evolution of the home computer from entertainment and educational machines into tools for amateur and professional multimedia editing devices and small business.

A computer is frequently imagined as an object with material properties, such as the type of processor and amount of memory. However, the brand identities of hardware platforms also include cultural icons such as visual motifs or jingles with emotional values. Both *Boing Ball* and *The Juggler* have been extensively discussed as iconic symbols of the Amiga community, giving it a sense of "platform nationalism." Several motifs from dealer demos, such as Jim Sachs' Amiga graphics, the Atari rainbow Fuji logo, and animated chrome bubbles, became recognizable symbols of hardware platforms and represent emotional approaches toward technological artifacts.

Acknowledgments

I would like to express my gratitude to Lars Heide, Markku Reunanen, Antti Silvast and two anonymous reviewers for valuable comments that helped me to improve this article.

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